http://www4.jsc.nasa.gov/ah/exceaa/Gilruth/Gilruth.htm

Hours: The Gilruth Center is open from 6:30 a.m.-10 p.m. Monday-Thursday, 6:30 a.m.-9 p.m. Friday, and 9 a.m.-2 p.m. Saturday. Contact the Gilruth Center at (281) 483-3345.

Sign up policy: All classes and athletic activities are on a first-come, first-served basis. Sign up in person at the Gilruth Center and show a yellow Gilruth or weight room badge. Classes tend to fill up two weeks in advance. Payment must be made in full, cash or by check, at the time of registration. No registration will be taken by telephone. For more information, call x33345.

Gilruth badges: Required for use of the Gilruth Center. Employees, spouses, eligible dependents, NASA retirees and spouses may apply for photo identification badges from 7:30 a.m.-9 p.m. Monday-Friday and 9 a.m.-2 p.m. Saturdays. Cost is \$10. Dependents must be between 16 and 23 years old.

Nutrition intervention program: Six-week program includes lectures, a private consultation with the dietitian and blood analysis to chart your progress. Program is open to all employees, contractors and spouses. For details call Tammie Shaw at x32980.

Defensive driving: One-day course is offered once a month at the Gilruth Center. Pre-registration required. Cost is \$25. Call for next available class.

Stamp club: Meets every second and fourth Monday at 7 p.m. in Rm. 216.

Weight safety: Required course for employees wishing to use the Gilruth weight room. Pre-registration is required. Cost is \$5. Annual weight room use fee is \$90. The cost for additional family members is \$50.

Exercise: Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays. Cost is \$24 for eight weeks.

Step/bench aerobics: Low-impact cardiovascular workout. Classes meet from 5:15-6:15 p.m. Tuesdays and Thursdays. Cost is \$32 for eight weeks. Kristen Taragzewski, instructor.

Yoga: Stretching class of low-impact exercises designed for people of all ages and abilities in a Westernized format. Meets Thursdays 5-6 p.m. Cost is \$32 for eight weeks. Call Darrell Matula, instructor, at x38520 for more information.

Ballroom dancing: Classes meet from 6:30-7:30 p.m. Thursdays for beginner, 8:30-9:30 p.m. for intermediate and 7:30-8:30 p.m. for advanced. Cost is \$60 per couple.

Country and western dancing: Beginner class meets 7-8:30 p.m. Monday. Advanced class (must know basic steps to all dances) meets 8:30-10 p.m. Monday. Cost is \$20 per couple.

Fitness program: Health-related fitness program includes a medical screening examination and a 12-week individually prescribed exercise program. For information call Larry Wier at x30301.

DATES C



September 27

Alzheimer's support group meets: The Clear Lake Alzheimer's Caregiver Support Group will meet at 7:30 p.m. to 9 p.m. September 27 in the first floor conference room, St. John Hospital West building, Nassau Bay. For more information, contact Nancy Malley at (281) 480-8917 or John Gouveia (281) 280-8517.

September 29

Astronomy seminar: The JSC Astronomy Seminar Club will meet at noon September 29 and October 6 and 13 in Bldg. 31, Rm. 248A. For more information, call Al Jackson at x35037.

Spaceland Toastmasters meet: The Spaceland Toastmasters will meet at 7 a.m. September 29 and October 6 and 13 at the House of Prayer Lutheran Church. For more information, call George Salazar at x30162.

Spaceteam Toastmasters meet: The Spaceteam Toastmasters will meet at 11:30 a.m. September 29 and October 6 and 13 at United Space Alliance, 600 Gemini. For information, call Patricia Blackwell at (281) 280-6863.

September 30

Communicators meet: The Clear Lake Communicators, a Toastmasters club, will meet at 11:30 a.m. September 30 and October 7 and 14 at Freeman Library, 16602 Diana Lane. For more information, call Allen Prescott at (281) 282-3281 or Mark Caronna at (281) 282-4306.

Radio Club meets: The JSC Amateur Radio Club will meet at 6:30 p.m. September 30 at the Piccadilly, 2465 Bay Area Blvd. For more information, call Larry Dietrich at x39198.

Inventors Luncheon: The 1999 JSC Inventors Luncheon, honoring inventors from December 1997 to December 1998, will be held at noon September 30 in Room 216 of the Gilruth Center. Cost is \$9.35 and reservations must be made by September 25. For additional information call x30837.

October 2

Star Party: The JSC Astronomical Society will host a public star party at Challenger 7 park October 2. For more information, call Chuck Shaw at x35416.

October 4

NSBE meets: The National Society of Black Engineers will meet at 6:30 p.m. October 4 at Texas Southern University, School of Technology, Rm. 316. For details, call Kimberly Topps at (281) 280-2917.

October 7

Warning System Test: The site-wide Employee Warning System will perform its monthly audio test at noon October 7. For more information, call Bob Gaffney at x34249.

October 8

Astronomers meet: The JSC Astronomical Society will meet at 7:30 p.m. October 8 at the Center for Advanced Space Studies, 3600 Bay Area Blvd. For information, call Chuck Shaw at x35416.

October 10

Westside NSS meets: The "Westside" group of the Clear Lake area chapter of the National Space Society will meet at 2 p.m. October 10 at Silicon Graphics, 11490 Westheimer, Suite 100. For information, call Murray Clark at (281) 367-2227.

October 12

Aero Club meets: The Bay Area Aero Club will meet at 7 p.m. October 12 at the Houston Gulf Airport clubhouse at 2750 FM 1266 in League City. For more information call Larry Hendrickson at x32050.

CLA-NSS meets: The Clear Lake area chapter of the National Space Society will meet at 6:30 p.m. October 12 at the Freeman Memorial Branch Library, 16602 Diana Lane. For more information call Murray Clark at (281) 367-2227.

NASA BRIEFS

NASA OCEAN RADAR WATCHES FOR BREAKUP OF ICEBERG

A NASA satellite instrument is keeping an eye on an iceberg the size of Rhode Island, the first time this space technology has been used to track a potential threat to international shipping.

NASA's new orbiting SeaWinds radar instrument, flying aboard the QuikScat satellite, will monitor Iceberg B10A, which snapped off Antarctica seven years ago and has since drifted into a shipping lane.

Iceberg B10A, which measures about 24 miles by 48 miles, was spotted by the instrument during its first pass over Antarctica, demonstrating SeaWinds' all-weather and day-night observational capabilities. The massive iceberg extends about 300 feet above water and may reach as deep as 1,000 feet below the ocean's surface. It is breaking up into smaller pieces that could pose a threat to commercial, cruise and fishing ships if the pieces are blown back into the shipping lane by high winds.

"Although the iceberg isn't posing a threat to ships in the area right now, pieces of B10A could be blown back into the shipping lane and become a danger to ships using the Antarctic's Drake Passage," said Dr. David Long, a member of the Sea-Winds science team from Utah's Brigham Young University, Provo, UT. Long said that the SeaWinds instrument will be able to help scientists at the National Ice Center, Suitland, MD, track pieces of the iceberg down to about 2.5 miles in size.

X-34 ROCKET PLANE TO BEGIN **EXTENSIVE TESTING**

NASA's experimental X-34 rocket plane will undergo testing in New Mexico, California and Florida under a test plan recently approved by agency officials. Both schedule and cost implications are currently being evaluated.

To support the expanded flight test program, engineers from Dryden Flight Research Center and Orbital Sciences Corporation, Dulles, VA, will upgrade the first airframe, designated A-1A, for flight. Following a series of tow tests on the ground at Dryden, the A-1A will be used to conduct unpowered test flights from Orbital's L-1011 carrier aircraft at the Army's White Sands Missile Range.

At the same time, Orbital, NASA's contractor for X-34, will complete assembly of the second X-34, designated A-2. Its Fastrac rocket engine will be installed on the vehicle and test fired on the ground at Holloman Air Force Base, NM, test facilities. After these ground test firings, the first series of powered flight tests of the X-34 will take place at Dryden.

NASA SELECTS 103 SMALL **BUSINESS PROJECTS**

In an attempt to stimulate the development of new technologies, NASA has selected 103 research proposals for negotiation of Phase II contract awards for its Small Business Innovation Research Program. The selected projects have a total value of approximately \$62 million and will be conducted by 90 small, high-technology firms in 27 states.

In addition to stimulating innovation, the SBIR program aims to increase the number of small businesses, including womenowned and disadvantaged firms, conducting federal research and commercializing the results of federally funded research.

SPACE CENTER Roundup

The Roundup is an official publication of the National Aeronautics and Space Administration, Johnson Space Center, Houston, Texas, and is published by the Public Affairs Office for all space center employees. The Roundup office is in Bldg. 2, Rm. 181. The mail code is AP3. The main telephone number is x38648, and the fax is x32000. Electronic mail messages may be directed to:

Assistant EditorNicole Cloutierncloutie@ems.jsc.nasa.gov

PRSRT STD U.S. POSTAGE PAID

> WEBSTER, TX Permit No. G27